# Lake Protection Water Plan Challenge Grant Request For Proposals

**Background:** With the passage of the Clean Water Legacy Act in 2007, the Minnesota Board of Water and Soil Resources recognized an opportunity to enhance comprehensive local water management planning by integrating available water quality data and land use information to develop strategic, quantified action plans incorporated into comprehensive local water plans. In 2008, a pilot project in Cass, Crow Wing and Aitkin Counties developed a template for presenting and assessing lake and land use information in a format useful to citizens and decision-makers.

The pilot program successfully developed a template that assessed 45 lakes in the three counties and integrated the information into their water management plans and used it to successfully compete for Clean Water Land and Legacy funds. The availability of electronic datasets and efficient management of information allowed the construction of individual assessment reports to be completed for less than $1,500 each. These reports are one way to describe a more quantifiable description of water quality protection.

The Minnesota Board of Water and Soil Resources (BWSR) is accepting proposals for Clean Water Legacy Grants to focus strategic water quality protection implementation actions concentrated on lake and lake watersheds. Candidate lakes must not be listed on the 2010 MPCA Impaired Waters (303(d)) List for parameters other than mercury. The purpose of these grant funds is to:

- Assess available water quality data and watershed information for the purpose of identifying water quality trends;
- Develop quantifiable water quality goals and outcomes based on the available information;
- Develop individual lake reports and a summary assessment that integrates watershed and water quality information, evaluates trends and recommends quantitative water quality protection measures;
- Integrate the water quality goals and quantifiable outcomes into local water management plan updates or amendments; and
- Demonstrate methods that can be expanded in the future to additional lakes.

| Agency Fund | Available Amount | Governmental Units Eligible for Funding | Required Match |
|---|---|---|---|
| BWSR Clean Water Legacy Protection Grants | $ 104,000 | Counties, SWCDs Watershed Districts, WMOs | 50% local cash or in-kind cash value match |

**Grant Applicant Eligibility**
Eligible applicants include local government units (LGU) or LGU joint powers organizations working under a current state approved, locally adopted water management plan. Partner organizations such as non-profits, watershed groups, school districts or lake associations must work in conjunction with these eligible applicants.

Watershed management organizations and metro watershed districts are not eligible for grants if a plan is more than 10 years beyond the plan approval dates by BWSR unless the plan specifies an earlier date (that is not less than five years beyond the BWSR approval date). Non-metro watershed districts are not eligible if a plan is more than 11 years and 3 months beyond the BWSR approval date. Counties are not eligible if the plan is more than 10 years beyond the BWSR approval date unless properly extended.

**Eligible Costs**

- Local Match = Non-state cash or in-kind cash value.
- Eligible project expenditures can only be incurred during the effective dates of the grant agreement or after the date of grant agreement execution, whichever occurs later.
- Grant recipients may request $100 per lake up to a maximum of $2,000 for reporting and grant management activities. This amount is proportional to the number of priority lakes accepted for the program. In general, it is anticipated that 20 lakes per county would be an upper limit.

| **Selection Criteria** | **Points available** |
|---|---|
| Assessment of report production costs based on criteria described | **20** |
| Lake size of approximately 500 acres | **20** |
| Available water quality data for trend analysis | **20** |
| Land parcel information available | **20** |
| Lakes identified as a priority in local water management plans | **20** |

**Other screening factors that will be used in proposal evaluation:**

- Deep lakes with cold-water fish species present or lakes with known species of concern or unique populations identified in a county biological survey or elsewhere;
- Lakes in watersheds with less than approximately 25% developed, agricultural, mining or open lands will receive priority consideration; and
- Applicants with multiple candidate lakes should list them in priority order.

An interagency team will review the applications and make recommendations for funding to the BWSR board.

Data collection, analysis and presentation should be conducted by technically sound, trained and knowledgeable personnel capable of providing data interpretation and analysis to resource professionals, citizens and decision-makers. Please include the following as an attachment to the grant application:

- a resume, curriculum vitae or description of education and training of the person, or organization doing the data analysis and assessment
- an example of previous similar analysis and assessment completed by that person or organization.

**Timeline:**

| | |
|---|---|
| January 3, 2011 | Application period opens |
| February 15, 2011 | Application period ends |
| March 30, 2011 | BWSR board awards grants (projected) |

**Application Submittal Process**

The application spreadsheet should be completed, attached to an email and submitted to: BWSR.Grants@state.mn.us by 4:30 PM on February 15, 2011.

**CWL Project Reporting Requirements**

BWSR Clean Water Legacy Funds will be administered via a standard grant agreement. BWSR will use grant agreements as contracts for assurance of deliverables and compliance with appropriate statutes, rules and established policies. Willful or negligent disregard of relevant statutes, rules and policies may lead to imposition of financial penalties on the grant recipient.

All BWSR funded projects will be required to develop a work plan including detail relating to the outcome(s) of the proposed project. All activities will be reported via the eLINK reporting system. For more information on eLINK go to: http://www.bwsr.state.mn.us/outreach/eLINK/index.html.

Grant recipients must display on their website the previous calendar year's detailed information on the expenditure of grant funds and measurable outcomes as a result of the expenditure of funds according to the format specified by the BWSR, by June 30 of each year.

**Grants and Public Information**

Under Minnesota Statute 13.599, responses to an RFP are nonpublic until the application deadline is reached. At that time, the name and address of the grantee, and the amount requested becomes public. All other data is nonpublic until the negotiation of the grant agreement with the selected grantee is completed. After the application evaluation process is completed, all data (except trade secret data) becomes public. Data created during the evaluation process is nonpublic until the negotiation of the grant agreement with the selected grantee(s) is completed.

**Prevailing Wage**

It is the responsibility of the grant recipient or contractor to pay prevailing wages on construction projects to which state prevailing wage laws apply (Minn. Stat. 177.42 – 177.44). All laborers and mechanics employed by grant recipients and subcontractors funded in whole or in part with state funds included in this RFP shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality. Additional information on prevailing wage requirements is available on the Department of Labor and Industry (DOLI) website: http://www.dli.mn.gov/LS/PrevWage.asp. Questions about the application of prevailing wage rates should be directed to DOLI at 651-284-5091. The Grant recipient is solely responsible for payment of all required prevailing wage rates

**Grant recipients must conduct the activities listed below.**

- Gather all available water quality data from local, state and federal sources.
- Review collected water quality data and identify statistically usable data (confirm sample site locations, confirm data is from a certified laboratory) and identify gaps and outliers.
- Available water quality data should be presented in narrative and graphical formats, and compared to ecoregion ranges and state water quality standards. Trend information for phosphorus, chlorophyll and transparency should be calculated and plotted when sufficient data exists. Data should be presented within the context of Carlson's Trophic Status Index using the mean value and data range.
- Land use and watershed data should be presented in a structure that includes information on the location within the Ecoregion, major basin, major watershed, minor watershed(s) and lakeshed.
- Present findings of water quality trends to comprehensive water plan task forces and lake association partners.
- Present findings of water quality trends to county commissioners, township and municipal officials from communities adjacent to candidate lakes.
- Meet at least once with lake association presidents and representatives at a water quality summit including representatives from DNR, PCA, P&Z, BWSR and other relevant agencies and organizations to discuss the lake reports, trends and to develop a quantitative and qualitative implementation strategy with specific actions for each lake to be included in the next water management plan update or amendment.

Analytical reports for each lake and the surrounding lakeshed should, at a minimum use the data sets found in Tables 1 and 2, and the accompanying content items, to develop a comprehensive assessment with sections similar to the description below.

**Table 1**

| **Lake Information** (see Lake Section List below) | | |
|---|---|---|
| Water quality data | Lake Management Plan | Miles of streams and rivers |
| User perception data | Septic system inventory | Miles of shoreline |
| Maximum depth | Lake vegetation survey or plan | Number of residences per shoreline mile |
| Mean depth | Water residence time (est.) | Shoreline Development Index |
| Inlet and outlet flow data (if available) | Known presence of aquatic invasive species | Shoreland development classification |

**Table 2**

| **Lakeshed and Watershed Information** (see Lakeshed and Watershed Section List below) | | |
|---|---|---|
| Public vs. private ownership | Watershed size | Miles of streams and Rivers |
| Land cover types | Changes in land cover type distribution over time | Lot size in the 1st 2nd and 3rd development tiers |
| Impervious cover | Miles of roads | Areas of developed land including Row agricultural, mining, and residential |
| Inlets and outlets | Wetland coverage | Demographic information and projections |
| Presence of feedlots | Public drainage ditches | Forest harvest activities |
| NPDES permitted facilities | Estimated number of livestock | |

## Lake and Lakeshed Assessment Content

**Lake Section**.

- Lake name and ID number along with a general description of the lake, inlets, outlets and water quality data. Physical characteristics of size, depth and watershed characteristics and location along with a tabular and narrative description that describes the general quality and quantity of data available for assessment including transparency.
- Lake chemistry and inlet/outlet data.
- Lake Map with littoral zone and monitoring locations identified.
- Tabular comparison of available water quality data and a comparison to available established standards.
- Ecoregion ranges and impaired waters standards along with an interpretation of the water quality data.
- Tabular and graphic representation along with an assessment of historical water quality characteristics including at a minimum, phosphorus, secchi disk transparency and chlorophyll-a (where available).
- Narrative and graphical representation of annual and seasonal variation of transparency along with an assessment of the data.
- Narrative and graphical representation of Citizen Lake Monitoring Program user perception and recreational suitability data.
- Narrative and graphical representation of annual and seasonal variation of phosphorus along with an assessment of the data.
- Narrative and graphical representation of annual and seasonal variation of dissolved oxygen profiles along with an assessment of the data.
- Narrative and graphical representation of trophic state index information along with an assessment of the data.
- Narrative and graphical representation of water quality trends along with a description of the statistical method used and an assessment of the trend information.
- Description of ecoregion concept and graphical comparison of water quality data using box-and-whisker plots for secchi disk, chlorophyll-a and phosphorus.
- A general narrative assessment of the water quality data set and recommendations for future emphasis of water quality data collection.

**Lakeshed and Watershed Section.**

- A narrative discussion and maps showing the lake and its location within the lakeshed, minor watersheds, major watershed and major basin.
- Tabular presentation and assessment of watershed and shoreline data identified in Table 2.
- Graphical representation and a map showing land cover categories as a percent of the lakeshed, changes over time, public vs. private ownership, range of accepted phosphorus runoff coefficients for land use categories, changes in impervious surface and a brief narrative description of the land cover found within the lakeshed.
- A graphical representation and narrative description of projected population growth in areas surrounding the lake.
- A status of the fishery and known information about species of concern, sensitive species, sensitive areas for spawning or nursery or other known features that would be relevant to a discussion of water quality protection.
- Known information about inlets and outlets to the lake.

**Summary Information**

Summary information comparison for all selected lakes in each county should include the following:

- List of abbreviations.
- Introduction describing the lakes assessed, narrative description of the data availability and the purpose of the report.
- Data availability: A short narrative or graphic that describes the general quality and quantity of data available for assessment including transparency, lake chemistry and inlet/outlet data.
- Trophic state index (TSI): Graphic and tabular representation of the TSI of assessed lakes, and a general description and a graphical representation of the TSI.
- Lake transparency trend summary: List of candidate lakes including date ranges for data, trend description and probability values for that trend.
- Ecoregion comparison: Graphical representation of Minnesota ecoregions and the county's position within that ecoregion; tabular comparison of TSI components of candidate lakes with ecoregion values and an evaluation of the data.
- Statewide assessments: graphical representation of any statewide assessments that have been conducted, a tabular representation of the most recent STORET database entry and an evaluation of data gaps for inclusion in statewide assessments.
- Lakeshed Assessments: A tabular comparison of data factors that influence water quality and an assessment of the relative importance of that factor for each lake. Also include a narrative description of each of the factors used in the lakeshed assessments and the basis for the assessment of importance.
- A tabular comparison of selected lakes of land cover and impervious surface coverage changes.
- Glossary of terms used and common acronyms.